



Australian Government

Department of Education, Employment and Workplace Relations

ICPCF410C Set up machine for complex carton folding and gluing

Revision Number: 1

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Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit describes the performance outcomes, skills and knowledge required to set up a machine for complex carton folding and gluing.
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Application of the Unit

Application of the unit	This unit requires the individual to set up a machine for complex carton folding and gluing.
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Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.
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Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Prepare for job	1.1. Read and interpret job requirements from job documentation or production control system 1.2. Set-up is planned and carried out correctly in minimum time with minimum wastage
2. Set up carton blank transportation system	2.1. Feeder is set up and adjusted according to job specifications 2.2. Carton blank pick-up and transportation system is set up and adjusted according to job specifications 2.3. Transfer systems are set up and adjusted according to job specifications
3. Set up machine for complex carton folding/gluing	3.1. Folding units are set up and adjusted according to job specifications 3.2. Folding rollers/belts/rails are set up and adjusted according to job specifications 3.3. Gluing system is set up and adjusted according to job specifications using glue wheel and/or multiple glue heads
4. Set up carton delivery system	4.1. Delivery is set up and adjusted according to job specifications 4.2. Substrate is removed from process according to job specifications 4.3. Carton transfer and control system is set up and adjusted according to job specifications
5. Conduct sample run	5.1. Material to be used for sample is organised correctly 5.2. Machine is set up and operated according to OHS requirements, manufacturer's specifications and enterprise procedures to produce a specified sample 5.3. Sample is visually inspected and/or tested for accuracy of folds, fibre tear, opening force, fluff and glue placement according to enterprise procedures
6. Readjust settings	6.1. Results are interpreted to determine adjustment requirements 6.2. Adjustment changes are carried out according to product and machine specifications

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

- OHS when ensuring that the work area is safe and ready for production according to safety requirements
- communication skills when reading and interpreting job requirements from the job documentation or production control system
- planning and organising when setting up the carton blank transportation system before the carton delivery system
- teamwork when maintaining the production process in association with other staff
- applying mathematical ideas and techniques when interpreting job requirements from job documentation or the production control system
- using technology when using carton folding and gluing machines
- problem solving by interpreting results to determine adjustment requirements

Required knowledge

- information concerning folding requirements that can be expected to be found in the job documentation or production control system
- interpretation of information to ensure smooth workflow throughout the factory
- factors that must be considered when planning a folding sample
- OHS factors that must be considered when setting folder transportation and delivery systems
- areas of the carton blank transportation system that should be monitored to ensure trouble-free operation
- parts of the carton blank pick-up system that should be adjusted to ensure accurate and continuous sheet handling
- areas of the delivery system that should be observed to maintain neat delivery of finished work
- areas of the delivery system that should be observed to prevent damage to the finished product
- checks to be made when substrate is removed from the machine
- OHS factors that must be considered when setting and/or adjusting the folding unit
- largest/smallest size carton blank that can be processed on this machine
- ways that the machine can be adapted to facilitate smaller/larger stock
- accuracy of a carton blank entering folding rollers
- causes of scratching/scuffing of substrate during transportation
- speed of the machine
- problems that can be expected if the machine is running too fast
- problems that can be expected if the machine rollers are set too loose
- problems that can be expected if there is too much roller pressure

REQUIRED SKILLS AND KNOWLEDGE

- problems that can be expected if the delivery system is not set correctly
- correct roller pressure for a given job
- roller pressures checks to be made for correctness
- adjusted to be made if the carton blank is out-of-square
- reasons for the sheet being out-of-square
- adjustment to ensure that the carton blanks are not smudging/"scuffing"
- adjustment to be made if the sheet will not leave the folding unit
- steps necessary to set up the gluing units
- care that should be taken to ensure a neat and clean gluing job
- adhesive that is used in the gluing unit
- adjustment of the length of the glue line
- causes of out-of-square folding and explain how each may be corrected
- segments of quality assurance that would be inspected at the completion of the sample run
- communication action that should be instigated if the job is out-of-square
- communication action that should be instigated if ink is too wet for production
- communication action that should be instigated if the job does not coincide with the sample
- areas of the machine that should be adjusted if carton blank is creasing
- areas of the machine that should be adjusted if carton blank is not entering the machine
- items that must be checked against the client's sample
- machine manuals and safety documentation that are relevant to this task and where they are kept and information that is included in these documents

Evidence Guide

EVIDENCE GUIDE	
The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.	
Overview of assessment	
Critical aspects for assessment and evidence required to demonstrate competency in this unit	Evidence of the following is essential: • Set up machine to produce complex cartons as required in normal production on, for example, a Royal 40, a Bobst Media or a Bobst Domino • Demonstrate an ability to find and use information relevant to the task from a variety of information sources • Set up at least THREE crash lock, six-corner and specialty work carton jobs, using different sizes and weights of cartons and including use of multiple gluing units, according to manufacturer's and job specifications, enterprise procedures and the listed Performance Criteria • Evidence for assessment may be gathered from assessment of the unit of competency alone or through an integrated assessment activity
Context of and specific resources for assessment	Assessment must ensure: • assessment may take place on the job, off the job or a combination of these • off the job assessment must be undertaken in a closely simulated workplace environment • access to a Royal 40, Bobst Media or Bobst Domino machine that may include multiple gluing units.
Method of assessment	A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit: • direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate
Guidance information for assessment	Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended

Range Statement

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Glue may include:	PVA and hot melt glue.
Machinery may include:	a Royal 40, a Bobst Media, a Bobst Domino and may include the use of multiple gluing units.
Carton board may include:	different sizes and weights of cartons.

Unit Sector(s)

Unit sector	
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Competency field

Competency field	Converting, Binding and Finishing
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Co-requisite units

Co-requisite units	